CLAIMS

1. A method for evaluating the bandwidth between a first point and a second point liable to exchange digital data packets in a telecommunications network including a plurality of sub-networks, characterized in that it includes the following steps:

for each transmission direction through at least one of said sub-networks,

a. associating a same identifier with the quasi-simultaneously transmitted packets,

b. time-stamping and recording the received packets,

c. identifying and sorting the packets received with the same identifier,

d. selecting the largest possible integral number m of groups of packets with the same identifier,

e. measuring the time intervals separating the instants when the packets of the selected groups are received by the second point,

f. calculating the bandwidth according to the number of packets of the selected groups and to the total transmission time of these packets.

2. The method according to claim 1, characterized in that the bandwidth is calculated with the following expression:

$$\overline{BW} = \frac{1}{m}\sum_{j=1}^{m}\left[\frac{1}{n_m}\sum_{i=1}^{n_m-1}\frac{l_{i,m}}{t_{(i+1)m}-t_{i,m}}\right]$$

wherein:

- li,m represents the length of the packet of rank i of the m^{th} group of packets,
- ti represents the time mark of the packet of rank i of the m^{th} group of packets,
- ti+1 represents the time mark of the packet of rank i+1 of m^{th} group of packets,
- n represents the number of packets of the m^{th} group of packets.

3. The method according to claim 2, characterized in that the number m is largest than or equal to 1.

4. The method according to any of claims 1 to 3, characterized in that marking of the data packets is achieved at the transmitting point upon a request from the receiving point.

5. The method according to any of claims 1 to 4, characterized in that the evaluation of the bandwidth is achieved on-line.

6. The method according to any of claims 1 to 4, characterized in that the evaluation of the bandwidth is achieved off-line.

7. The method according to any of the preceding claims, characterized in that the telecommunications network is of the IP type.

8. A device for evaluating the bandwidth between a first point and a second point liable to exchange digital

data packets in a telecommunications network including a module for marking the transmitted packets and a module for analyzing the received packets, characterized in that the analysis module includes:

- means for time-stamping the received packets,
- means for sorting the received packets,
- means for measuring the time intervals separating the instants when the transmitted packets are received by the second point,
- means for calculating the bandwidth.

9. A module for analyzing data packets received in a telecommunications network, characterized in that it includes:

- means for time-stamping the received packets,
- means for sorting the received packets,
- means for measuring the time intervals separating the instants when the transmitted packets are received by the second point,
- means for calculating the bandwidth.